

### **REMARKS**

Reconsideration of the application in light of the following remarks is respectfully requested.

#### **Status of the Claims**

Claims 1, 2, 6, 7, 11-17, 19-28 and 30-32 are pending in this application. Claims 3-5, 8-10, 18 and 29 have been previously canceled without prejudice to the subject matter therein. Claim 1 has been amended. No new matter has been added.

#### **Objection to the Claims**

Claims 1, 2, 6, 7, 11-17, 19-28 and 30-32 are objected to as having informalities. Applicants have amended claim 1 as suggested by the Examiner. Applicants request reconsideration and withdrawal of this objection to claims 1, 2, 6, 7, 11-17, 19-28 and 30-32.

#### **Rejections under 35 U.S.C. § 112**

Claim 1 is rejected because it refers to the barrier layer twice using both “comprises” and “constituted of” language. Applicants have deleted the clause containing the phrase “constituted of,” rendering this rejection moot. Applicants request reconsideration and withdrawal of this rejection of claim 1.

Claims 1, 2, 6, 7, 11-17, 19-28 and 30-32 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Applicants thank the Examiner for the courtesy of a telephone call on April 9, 2009, clarifying the nature of this rejection. The Examiner noted that amending claim 1 to address the claim objections and the “comprises” / “constituted of” rejection would cure this remaining § 112, second paragraph rejection. Because these amendments have been made to claim 1, Applicants request reconsideration and withdrawal of the rejection of claims 1, 2, 6, 7, 11-17, 19-28 and 30-32.

### **Rejections under 35 U.S.C. § 103**

Claims 1, 2, 7, 26-28 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent No. 09-058650 to Tatsuhiko et al. (hereinafter “Tatsuhiko”) in view of U.S. Patent No. 4,623,587 to Ito et al. (hereinafter “Ito”). In particular, with regard to claims 1, 26 and 27 and in reliance only upon Tatsuhiko, the Examiner contends that “Tatsuhiko et al. also teach that adhesives can be used between resin layers and **between resin and paper layers** (paragraph 0015)” (emphasis added). Applicants disagree with the Examiner and traverse. Applicants note that the Examiner has provided a translation of Tatsuhiko by the McElroy Translation Company which differs in wording from a translation provided by Applicants on January 11, 2008.

Claim 1 recites a resin laminate comprising at least three layers formed by a barrier resin layer sandwiched between two adhesive resin layers, such that “an adhesive resin layer is [in contact] with said coated surface of said base paper,” the coating on the paper being a coating of denatured polyethylene imine.

In contrast, Tatsuhiko paragraph [0015] (McElroy translation) cited by the Examiner states: “a highly adhesive resin layer may be provided, and a physical science [sic; possibly physicochemical] **treatment** such as a corona **treatment**, a plasma **treatment**, or an ozone **treatment may be performed** during or before the lamination step in order to improve the **bonding** between the respective resin layers and **between the resin layer and the paper**”

(emphasis added). Although Tatsuhiko par. [0015] discloses an adhesive resin layer, this paragraph does not disclose an adhesive resin layer in contact with a coated surface of the paper. Nor does Tatsuhiko disclose an outer adhesive resin layer on the opposite surface of the laminate. Rather, Tatsuhiko par. [0015] discloses that a **treatment** improves the bonding between “the resin layer” and the paper. Applicants submit that this refers to barrier resin layers rather than adhesive resin layers, because Tatsuhiko par. [0010] discloses that the polyamide resin layer (i.e., the barrier layer) “is preferably provided between the paper” and the other layers. Nor does Tatsuhiko suggest the structure recited in claim 1, because without an outer adhesive layer to protect the barrier resin layer, the molten barrier resin layer easily degrades by oxidation while it is extruded from the extruder and adhered to the base paper, resulting in lowered barrier performance (see, e.g., par. [0012] of the present application).

Although Tatsuhiko paragraph [0012] discloses polyethyleneimine used as an undercoat agent, it is applied the surface of paper after paper-making “in order to improve the bonding property with the resin layer.” The adhesion in Tatsuhiko is between the polyethyleneimine and a **barrier** resin. In contrast, in the present application, polyethylene imine is used to **bond** the **adhesive** resin and the base paper even at a low-processing temperature of 290°C or lower (see, e.g., par. [0054] of the present application). Tatsuhiko does not disclose the recited structure of polyethylene imine bonded with an adhesive resin layer. Nor would there be any motivation to use the structure of Tatsuhiko in the present application, because the present application is clearly different from Tatsuhiko in terms of its purpose and effects – the present application is bondable onto paper without thermal decomposition of the barrier layer.

The Examiner has further relied upon Ito as teaching that “the film is **formed** by a coextrusion method in which the temperature at the die is held at 270°C” (Office Action, ¶14, emphasis added). This is the temperature at which a double-layered film is prepared by **extruding** random polypropylene and a resin composition composed of the random polypropylene and ethylene octene-1 copolymer, followed by cooling and winding up the extruded resin.

In contrast, claim 1 of the present application recites 290°C in connection with **lamination** of the multi-resin layer. It is intended that the lamination at 290°C or lower is accomplished without thermal decomposition of the barrier resin layer (see, e.g., par. [0069]-[0070] of the present application). The Examiner further contends that the recitation of 290°C is a product-by-process limitation (Office Action, ¶49). Applicants have amended claim 1 to remove the contended product-by-process limitation, reciting that “the multi-resin layer is bondable, at 290°C or lower at the outlet of the die, onto the base paper without thermal decomposition of the barrier resin layer.”

Applicants submit that neither Tatsuhiko nor Ito, either alone or in combination, disclose or suggest the recited limitations of claim 1. Claims 2, 7, 26-28 and 32 depend upon base independent claim 1, and should be allowable by reason of their dependency upon an allowable base claim. For the foregoing reasons, Applicants request reconsideration and withdrawal of the rejection of claims 1, 2, 7, 26-28 and 32 as unpatentable over Tatsuhiko in view of Ito.

Claims 6, 17, 30 and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tatsuhiko in view of Ito and U.S. Patent No. 5,358,785 to Akao et al. (hereinafter “Akao”). The Examiner contends that: Akao discloses multilayer laminated films, formed using extrusion processes, which are used in packaging; and that polyolefin resins graft-modified by carboxylic acids are known in the art as adhesive resins used to join other resins.

Claims 6, 17, 30 and 31 depend upon base independent claim 1. Applicants submit that, for the reasons discussed above with respect to the rejection of claims 1, 2, 7, 26-28 and 32 over Tatsuhiko in view of Ito, no combination of Tatsuhiko, Ito, and Akao disclose or suggest all of the elements of amended claim 1. Therefore claims 6, 17, 30 and 31 are allowable as dependent upon an allowable base claim. Applicants request reconsideration and withdrawal of the rejection of claims 6, 17, 30 and 31 as unpatentable over Tatsuhiko in view of Ito and Akao.

Claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tatsuhiko in view of Ito and U.S. Patent No. 5,942,320 to Miyake et al. (hereinafter “Miyake”).

The Examiner contends that Miyake discloses a multilayer barrier composite film with gas barrier properties.

Claims 11 and 12 depend upon base independent claim 1. Applicants submit that, for the reasons discussed above with respect to the rejection of claims 1, 2, 7, 26-28 and 32 over Tatsuhiko in view of Ito, no combination of Tatsuhiko, Ito, and Miyake disclose or suggest all of the elements of amended claim 1. Therefore claims 11 and 12 are allowable as dependent upon an allowable base claim. Applicants request reconsideration and withdrawal of the rejection of claims 11 and 12 as unpatentable over Tatsuhiko in view of Ito and Miyake.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Tatsuhiko in view of Ito and Akao in further view of Miyake. The Examiner contends that Miyake teaches the barrier layer of the thickness recited in claim 13.

Claim 13 depends upon base independent claim 1. Applicants submit that, for the reasons discussed above with respect to the rejection of claims 1, 2, 7, 26-28 and 32 over Tatsuhiko in view of Ito, no combination of Tatsuhiko, Ito, Akao, and Miyake disclose or suggest all of the elements of amended claim 1. Therefore claim 13 is allowable as dependent upon an allowable base claim. Applicants request reconsideration and withdrawal of the rejection of claim 13 as unpatentable over Tatsuhiko in view of Ito, Akao, and Miyake.

Claims 14-16 and 19-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tatsuhiko in view of Ito and International Publication No. WO 00/44632 to Frisk et al. with U.S. Patent No. 6,974,612 relied upon as the translation of WO 00/44632 (hereinafter "Frisk"). The Examiner contends that Frisk discloses a package material for paper containers having the various properties recited in claims 14-16 and 19-25.

Claims 14-16 and 19-25 depend upon base independent claim 1. Applicants submit that, for the reasons discussed above with respect to the rejection of claims 1, 2, 7, 26-28 and 32 over Tatsuhiko in view of Ito, no combination of Tatsuhiko, Ito and Frisk disclose or suggest all of the

elements of amended claim 1. Therefore claims 14-16 and 19-25 are allowable as dependent upon an allowable base claim. Applicants request reconsideration and withdrawal of the rejection of claims 14-16 and 19-25 as unpatentable over Tatsuhiko, Ito and Frisk.

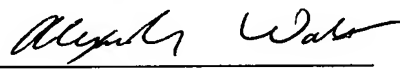
**CONCLUSION**

Each and every point raised in the Office Action mailed October 15, 2008 has been addressed on the basis of the above remarks. In view of the foregoing it is believed that claims 1, 2, 6, 7, 11-17, 19-28 and 30-32 are in condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

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Respectfully submitted,

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